

INFORMATION REPORT INFORMATION REPORT

CENTRAL INTELLIGENCE AGENCY

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50X1-HUM

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SOURCE EVALUATIONS ARE DEFINITIVE. APPRAISAL OF CONTENT IS TENTATIVE.

1. The Mine Inspectorate at Horni Slavkov (Schlaggenwald) (N 51/P 68) controlled 21 mines which were numbered I through XXI. The previous Barbora, Prokop, and Zdar Buh Mines had been redesignated Mines I, II, and III. Prior to September 1951, a total of 14 mines had been in operation in the Horni Slavkov area. Mine XXI was opened in March 1953. Mines IX and X were partially deactivated in the winter of 1952/1953, because their ore yield was too small. The remaining ore of the partially deactivated mines was exploited from Mines III and VIII. Mine VI was located near Lesnice (N 51/P 68), Mine VIII near Schoenfeld (N 51/P 68). In early July 1953, the third and the fourth levels of Mine VI caved in and mining operations had to be discontinued for two months. The newly opened Mines XV through XXI were located in the area 5 km. northwest of Horni Slavkov in the direction of Loket (Elbogen) (N 51/P 58). At Mine VI, mining operations were conducted at the second, third, fourth, and fifth levels. A sixth level was sunk in May 1953. At Mine VIII, ore was obtained at the second, third, and fourth levels. Waste dumps erected prior to 1939 had been tested for radioactive material in recent years. Material from dumps of radioactive ore was continuously trucked to the ore-washing plants at Horni Zdar (N 51/K 70).¹ Prior to late 1952, radioactive ore had been piled up near Mine VIII on a dump about 50 x 150 x 8 m. The ore dumped there was estimated to measure about 30,000 cubic meters. After November 1952, ore was continuously trucked from this dump to the ore-processing plants. Waste dumps had to be removed to sites outside the barbed-wire fences because storage space was scarce at the individual mines.

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(Note: Washington distribution indicated by "X"; Field distribution by "#")

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2. Dumps of ore with radioactivity below 0.20 were turned over to the Czechs for further processing.
3. Mine VI was one of the installations which were very productive. Between January and April 1953, it is believed that the following quantities of ore were mined there per shift:

3 to 3.5 tons of pitchblende
 40 to 50 tons of radioactive ore
 350 to 400 tons of sterile rock

Work was done in three shifts; the average number of working days was 25 per month. In December 1952, the output of Mine VIII was smaller than that of Mine VI. The output per shift at Mine VIII was estimated to be:

3 tons of pitchblende
 40 to 45 tons of radioactive ore
 300 to 350 tons of sterile rock

The monthly output of ore fluctuated 20 to 30 percent depending on the thickness of ore loads and the hardness of the ore-bearing rock. Czech workers stated that Mine VI, previously Barbora II Mine, was allegedly the most productive mine near Horni Slavkov. In the first months of 1953, six or seven Tatra trucks, each loaded with 11 tons of ore packed in barrels, were shipped from Mine VI to the OTK every week. [redacted] about four of these trucks were loaded with pitchblende. [redacted]

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4. In August 1952, work on the construction of new ore-sorting stations was started near Mines III, VI, VII, VIII, and IX.² These sorting stations were scheduled to be equipped with crushing facilities. In May 1953, none of the new sorting stations was in operation. The new sorting stations were designed to ease the strain on the ore-washing plants and accelerate operations there. Ore-sorting was conducted by means of Geiger counters which had the form of plates 80 x 100 cm. in size. The mine cars loaded with ore were put between these plates.

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5. [redacted] the ore-sorting stations scheduled to be erected at the individual mines were to be of varying size and layout. The most suitable form for an ore-sorting station had, allegedly, not yet been determined. As previously, the load of all mine cars was to be tested near the elevator tower. The sterile rock was picked out there and shipped from the testing station to waste dumps. The previous differentiation between types A and U material was to be discontinued. The radioactive material was to be sent into the new sorting plants where it was dumped into the crushing plant. From the funnel of the crushing plant, the crushed material was dropped on an inclined conveyor belt. At the upper edge of the conveyor belt there was a Geiger counter which operated an automatic sorting device in the form of a plate which separated the sterile rock from radioactive material. The radioactive material was taken by a conveyor belt to four funnel-shaped ore bunkers each of which had a storage capacity of from 10 to 15 tons. The ore from these bunkers was discharged onto another conveyor belt where the pitchblende was separated by means of rod-like Geiger counters served by four to six workers. The selected ore was shipped directly to an ore-collecting point. The remaining radioactive material was sent to other processing plants. No information was available on whether this material was packed in barrels or boxes.

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6. The ore-washing plant for the Horni Slavkov area was located in Horni Zdar.¹ The ore was also sorted there. A distinction was made between A and U material. At the ore-washing plant, the A material was classified according to its degree of radioactivity. The U material was dropped on a dump. From the ore-washing plants, the ore was packed in lead-lined boxes and sent for further processing to the GDR. At the OTK, the ore was packed in barrels and boxes and subsequently shipped directly to the USSR. The ore-processing plant at Horni

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Zdar was believed to be located near OTK Vykmanov. The name "Tiefenbach" (Hluboky - N 51/K 60), which is about three kilometers west of Horni Zdar, was remembered in this connection. [redacted] the radioactive material from the ore-washing plants near Jachymov, Elias, Bratrstvi, and Horni Zdar was shipped by rail to the GDR for further processing. 50X1-HUM

7. [redacted] work on the construction of a new ore-sorting plant was started at the Barbora II Mine in the summer of 1952. In its outward appearance, this sorting plant looked like the modern sorting plant at the Elias Mine at Jachymov. The technical setup of the two installations was also believed to be the same.³ The new sorting plant at the Barbora II Mine was put in operation in July 1953. All A and U material was scheduled to be sent from the ore-testing stations to the new ore-sorting plant. [redacted] 50X1-HUM

The ore arriving in mine cars was dumped from a horizontal tilting plant into a crushing plant. After being crushed, the ore was dumped on two inclined conveyor belts which took the ore to a level 10 m. higher. At the end of the conveyor belts, there were Geiger counters which operated an automatic sorting device consisting of a swinging metal sheet. The automatic sorting device separated the radioactive ore from sterile rock and directed it into two different funnels, each of which served six bunkers. Each of the 12 bunkers had a storage capacity of 25 mine carloads. [redacted] the bunkers for the sterile rock were fitted with a shaking sieve and a second discharge funnel on the side. These discharge funnels were also fitted with a Geiger counter. The Geiger counter operated a device which automatically directed radioactive material on a special conveyor belt. The sterile rock was discharged through an opening at the bottom and dropped onto another conveyor belt. The conveyor belt took the sterile rock to mine trucks which hauled it to dumps. The radioactive ore collected on the other conveyor belt was also discharged into mine cars. These mine cars hauled the ore to the storage site for U material where it was subsequently packed. Each of the two conveyor belts below the ore bunkers was 60 cm. wide and 8 to 10 m. long. 50X1-HUM

8. No information was available concerning the radioactivity of the ore mined nor on the methods by which the degree of radioactivity was determined. [redacted] during each shift, one or two Tatra trucks, each of which had a load capacity of 10 tons, was loaded with boxes of ore at the ore-collecting point of Mine IV. This ore was dispatched to OTK Vykmanov. Each of the boxes weighed from 70 to 80 kg. [redacted] Mine IV was reputed to be the most efficient installation in the Horni Slavkov area. Its output surpassed that of all other mines in this area in the summer of 1953. Administrative control over the ore-collecting point at Mine IV was exercised by the Inspectorate and not by the mine management. Special bonuses were given to the mine only for the high-quality ore sorted at the ore-sorting stations; no bonuses were granted for pitchblende, sorted at the working face by miners. Miners also called the ore-collecting point "small OTK". Czech employees equipped with Geiger counters checked the ore underground. Pitchblende was put into buckets and sent directly to the ore-collecting point of the mine. Aboveground, all mine cars loaded with ore were directed through the ore-testing station, which was about 80 m. west of the elevator tower. The sterile rock was shipped on a narrow-gauge field railway track through a tunnel about 400 m. long, to a waste dump located north of the railroad line. 50X1-HUM

9. Mines known [redacted] in the Horni Slavkov area included the Lesnice, Barbora, and Svatopluk Mines in addition to Mines Nos. 8, 9, 11, 13, 14, 16, 17, and 18. [redacted] 50X1-HUM
- [redacted] the mine had eight working levels which were about 50 m. below one another. Most productive were the galleries extending toward the south. In 1951 and 1952, the Lesnice Mine was the most productive installation in the area. In 1953, the ore output decreased, and the installation was surpassed in productivity by the Barbora Mine. The first level of the Lesnice Mine was connected to the Svatopluk Mine. The uranium ore produced at 50X1-HUM

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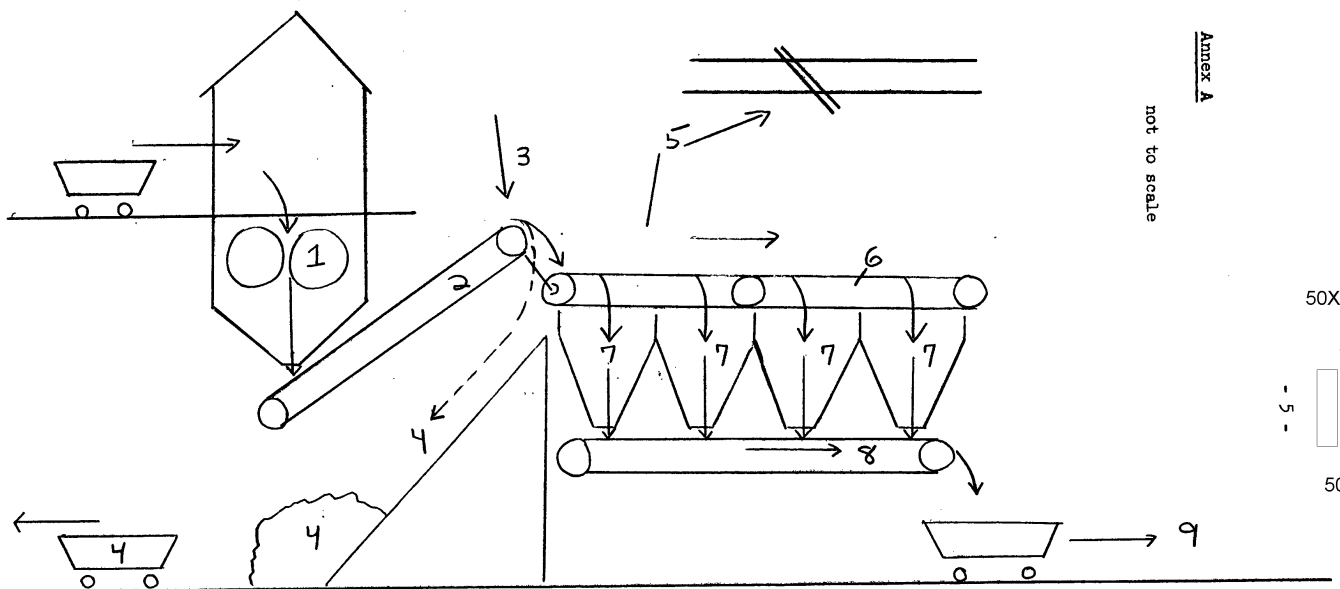
the mine was loaded at the working face into small mine cars which had a carrying capacity of 0.6 cubic meters. The cars measured about 120 x 65 x 80 cm. 50X1-HUM
 [redacted] in 1952, 100 carloads of sterile rock, 50X1-HUM
 8 to 10 carloads of radioactive ore, and two or three carloads of pure ore were obtained on the second level during an eight-hour shift. The 1952 total output of the Lesnice Mine was estimated to be 40 carloads of radioactive ore and eight carloads of pitchblende per shift. 50X1-HUM
 [redacted] the output of ore dropped in 1953.

10. Many Russians were employed in the research department at Horni Slavkov. Chief of this department was Soviet engineer Boskov (fnu), [redacted] 50X1-HUM
 [redacted] Attached to the department was Soviet engineer Vanikov (fnu), 50X1-HUM
 [redacted] In September 1953, the research department moved to Hotel Kopelia in Marianske Lazne, or at any rate the two Soviet engineers mentioned were transferred there.⁴

1. [redacted] Comment: Horni Zdar is the railroad station of OTK Vykmánov. 50X1-HUM
2. [redacted] Comment: For sketch of the new ore-sorting station near Mine VIII, see Annex A.
3. [redacted] Comment: For sketch of the installation at Mines III and IV and schematic diagram of the new sorting plant, see Annex B.
4. [redacted] Comment: No Hotel Kopelia is listed either in the 1947 or the 1954 telephone directory for Marianske Lazne.

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Annex A

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Legend to Annex A: New Ore Sorting Station near Mine VIII

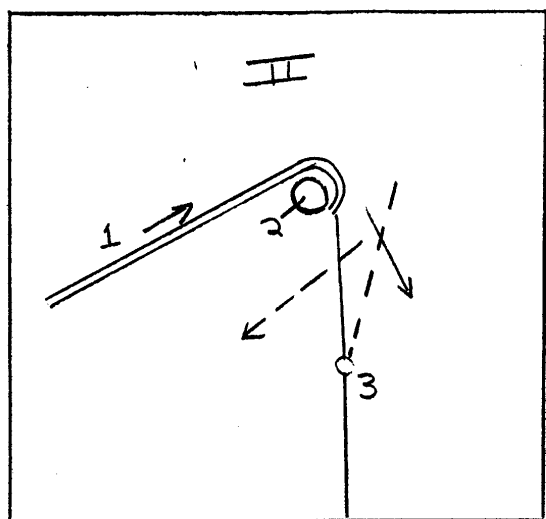
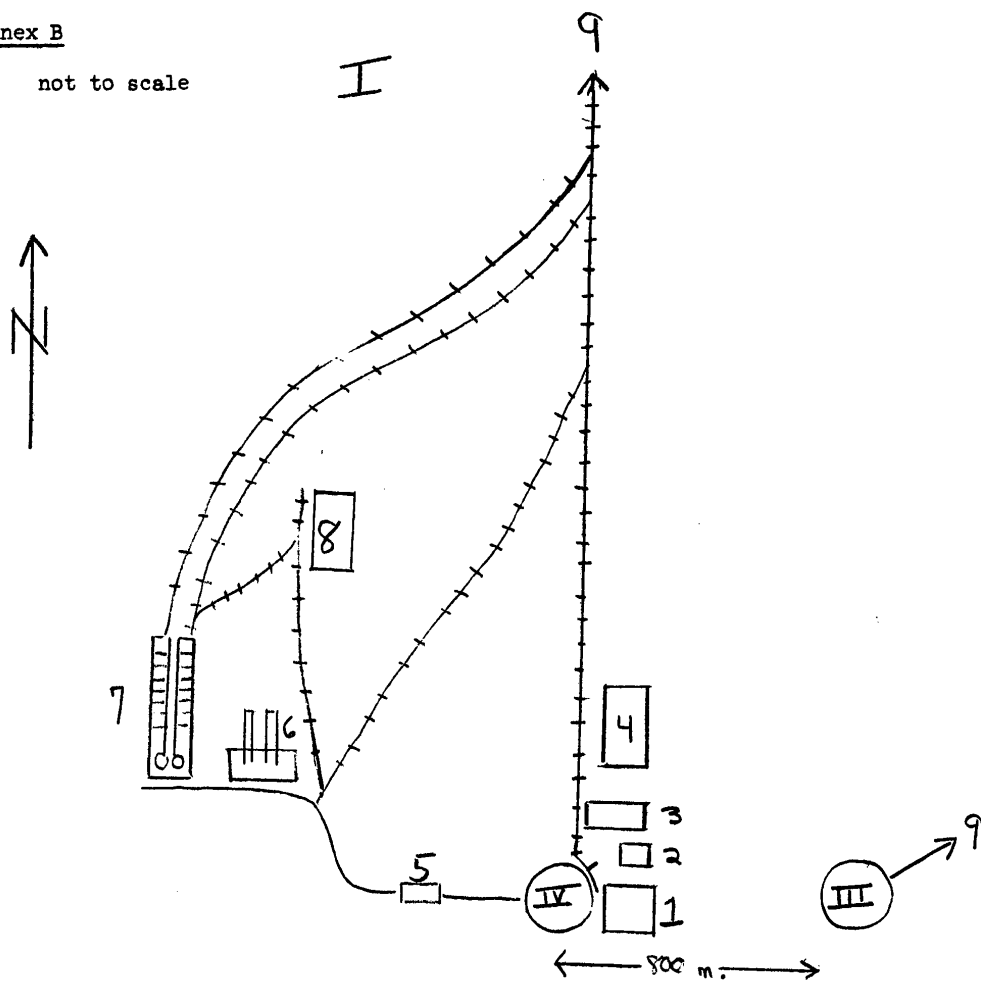
1. Crushing plant.
2. Scraper conveyor.
3. Geiger counter.
4. Sterile rock.
5. Swinging plate controlling the flow of ore.
6. Conveyor belt.
7. Storage bunkers for radioactive material.
8. Conveyor belt where ore was sorted manually by means of rod-like Geiger counters.
9. To the collecting point.

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not to scale



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Legend to Annex B: Layout of Mines III and IV

Sketch I: Mine Installations

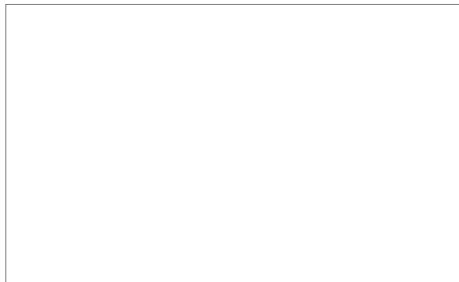
1. Engine house.
2. Lamp station.
3. Transformer station.
4. Administration building.
5. Ore-testing station.
6. Old ore-sorting plant.
7. New crushing plant with sorting facilities.
8. Storage and packing of A material.
9. To the dump.

Sketch II: Schematic Diagram of the New Sorting Station

1. Conveyor belt.
2. Geiger counter.
3. Separating device.

—————→ flow of radioactive material.

- - - - -→ flow of sterile rock.



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